



1

OK to enter

ECC

5/25/05

Repulpable wax

1

2

3 CROSS-REFERENCES TO RELATED APPLICATIONS

4 This application claims the benefit of United States Provisional Patent

5 Application, Ser. No.: 60/345,915, filed on 4 January 2002, the contents of which are
6 hereby incorporated by reference in their entirety.

7

8 FIELD OF THE INVENTION

9 The present invention is a vegetable wax comprising triglycerides. Particularly,
10 the present invention is used as an additive in boxboard coatings and adhesives, either by
11 itself or as part of a composition, to render the coating or adhesive dispersible in warm
12 alkaline water.

13

14 BACKGROUND OF THE INVENTION

15

16 Petroleum waxes, such as paraffin and microcrystalline wax, and synthetic waxes
17 such as Fischer Tropsch ("FT") and polyethylene, are used extensively in paper coatings
18 to impart moisture resistance and enhanced moisture vapor barrier properties to the paper.
19 Waxes used for this purpose tend to be low viscosity (<1,000 cps @ 284 degrees F) and
20 have relatively low melting temperatures (<302 degrees F).

21

22 Large oil companies such as Shell Oil, ExxonMobil and other oil refiners supply
23 petroleum waxes used in these applications. Most of this wax is derived in the process of
24 refining lube oil where the wax is separated from the lube oil stock and refined into
25 various fractions of wax including paraffins, and microcrystalline waxes. Formulators
26 such as Astor Wax, IGI and Moore & Munger also supply wax for these applications that
27 is either resold as is from the oil companies, and/or formulated and repackaged to meet
28 the specific needs of customers. The two largest suppliers of FT waxes are Sasol from
29 South Africa and Shell Oil from Malaysia. The waxes are sometimes formulated with
30 other ingredients to modify their properties for specific applications. Such modifiers
31 include resins to improve strength and toughness or improve flexibility or gloss.

32